Recombinant FUCM protein (His tag)

Catalog Number	548633
Species	Human
Expression System	E. coli
Accession	A2VDF0
Molecular Weight	Predictes a molecular mass of 18.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	1-154
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-154 aa (A2VDF0) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant human Fucose mutarotase (EC 5.1.3.29) fragment (amino acids 1-154) is a high-purity protein designed for structural and biochemical studies. This soluble and stable fragment enables investigation into the enzyme's role in interconverting alpha- and beta-L-fucose isoforms, supporting research on fucose metabolism and glycosylation pathways. Fucose mutarotase (encoded by the FUOM gene) catalyzes the interconversion between alpha- and beta-L-fucose isoforms, with the beta-form (70.5% prevalence) being metabolized through the salvage pathway. This enzyme plays a critical role in GDP-L-fucose production, which serves as the essential substrate for fucosyltransferases in the endoplasmic reticulum. These fucosylation reactions generate key structures involved in cell-cell adhesion and recognition processes, making fucose mutarotase fundamental to understanding glycosylation biology and its implications in cellular communication.